

REMARKS

Claims 1, 2, 4-6 and 8 are pending in this application. By this Amendment, claims 1, 2 and 6 are amended. No new matter is added by this Amendment. Claims 7 and 9-11 are canceled without prejudice to, or disclaimer of, the subject matter recited in these claims. Reconsideration of the application based on the above amendments and the following remarks is respectfully requested.

The Office Action, in paragraph 13, indicates that claims 4, 5 and 8 recite allowable subject matter. Specifically, the Office Action indicates that these claims would be allowable if rewritten in independent form including all of the features of the base claim and any intervening claims. Applicant appreciates this indication of allowability, but respectfully submits that at least claim 1, from which these claims directly or indirectly depend, is allowable for at least the reasons discussed below.

The Office Action, in paragraph 2, objects to claims 7 and 9-11 under 37 C.F.R. §1.75(c) as being of improper dependent form. The cancellation of claims 7 and 9-11 renders this objection moot.

The Office Action, in paragraphs 7 and 9, rejects claims 1, 2, 7 and 9-11 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,610,790 to Staab et al. (hereinafter "Staab") in view of U.S. Patent Application Publication No. 2003/0092213 to Yamazaki et al. (hereinafter "Yamazaki"). Further, the Office Action, in paragraph 11, rejects claim 6 under 35 U.S.C. §103(a) as being unpatentable over Staab in view of Yamazaki and further in view of U.S. Patent Application Publication No. 2003/0071291 to Beasom and further in view of U.S. Patent No. 6,055,460 to Shopbell and further in view of U.S. Patent No. 6,187,684 to Farber et al. (hereinafter "Farber"). The Applicant respectfully traverses these rejections.

The Office Action asserts that Staab teaches many of the features recited in the pending claims conceding that Staab does not disclose doping the silicon with p-type germanium. The Office Action relies on Yamazaki to overcome this deficiency of Staab.

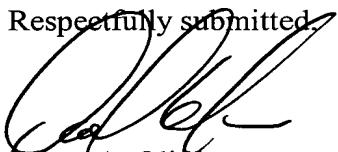
Yamazaki discloses that "Elements of Group 13 of the Periodic Table such as boron (B), aluminum (Al) and germanium (Ge) are known as p-type impurity elements for semiconductors," (paragraph [0084]). This statement is incorrect regarding Elements of Group 13 and appears to be a mistranslation of the Japanese Patent Application No. JP-A-11-171485 (hereinafter "'485," partial English-language translation attached) to which Yamazaki claims priority. Yamazaki should read, "Elements of Group 13 of the Periodic Table, such as boron (B), aluminum (Al), and gallium (Ga) are known as p-type impurity elements for semiconductors" (see block ([0053] of the attached partial English-language translation of '485). One of ordinary skill in the art would have recognized that the assertion of Yamazaki was erroneous and that Yamazaki refers to the elements of Group 13, *i.e.*, boron, aluminum and gallium, and not germanium. Therefore, one of ordinary skill in the art would not have been motivated to combine the references of Yamazaki and Staab, in the manner suggested by the Office Action, to render obvious the subject matter of the pending claims. In other words, one of ordinary skill in the art, at the time of the invention, would not have been motivated to make the proposed substitution, combination or other modification, and, in fact, would have discounted Yamazaki for the inclusion of the specific features that the Office Action relies on in the reference due to the erroneous recitation from the Periodic Table, Group 13, elements. One of ordinary skill in the art would have recognized that germanium, as cited in Yamazaki, is not a Group 13 periodic element.

For at least this reason, the references cannot reasonably be considered to be combinable in the manner suggested by the Office Action to render obvious the combinations of all of the features in at least independent claims 1, 2 and 6.

Accordingly, reconsideration and withdrawal of the rejection of claims 1, 2, 4-6 and 8 under 35 U.S.C. §103(a) as being unpatentable over any combination of the applied references are respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 2 and 6, in addition to the indicated allowable subject matter of claims 4, 5 and 8, are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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JAO:DAT/brp

Attachment:

Partial English-language translation of JP-A-11-171485

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